

CLAIMS

What is claimed is:

1. A method for constructing and maintaining data representations of lifetimes of telephone calls comprising one or more segments, audio data for each segment being
5 recorded on one or more recorders, the method comprising:
 - (a) constructing a call record for at least one telephone call;
 - (b) receiving data regarding telephony events associated with one or more telephone calls;
 - (c) matching a received telephony event with a constructed call record;
 - 10 (d) updating the matching call record based on the received telephony event data; and
 - (e) combining the updated call record with data indicating the location of recorded audio data for the segment of the call, to obtain a master call record representing the lifetime of the telephone call.
- 15 2. The method of claim 1 wherein the step of updating the matching call record comprises invoking one or more handler routines corresponding to the telephony event.
3. The method of claim 1 further comprising the step of translating the data
20 regarding telephony events into a platform-specific format.
4. The method of claim 1 wherein in step (c) a confidence factor algorithm is used to determine whether a match has been found.
- 25 5. The method of claim 1 wherein the call record is updated with data describing the duration of the telephone call.
6. The method of claim 1 wherein the call record is updated with data describing the start and end time of the telephone call.

5.
7. The method of claim 1 wherein the master call record comprises a serial number that identifies the telephone call.

8. The method of claim 3 wherein the call record is updated with data describing
5 the duration of the telephone call.

9. The method of claim 3 wherein the call record is updated with data describing the start and end time of the telephone call.

6
10. The method of claim 1 wherein the call record is updated with data fields describing each participant of the telephone call.

7
8.
11. The method of claim 5 wherein the call record is updated with data fields describing each participant of the telephone call.

15
12. The method of claim 9 wherein the call record is updated with data fields describing each participant of the telephone call.

8.
13. The method of claim 1 further comprising the step of assembling and playing
20 back segments of telephone calls using the recorder locations described in the master call record for each telephone call.

9.
14. The method of claim 1 further comprising the step of using the master call record to display a graphical representation of said telephone call.

25
10.
15. The method of claim 3 further comprising the step of using the master call record to display a graphical representation of said telephone call.

11.
16. The method of claim 14 wherein the graphical representation comprises a
30 representation of each segment of the telephone call.

17. The method of claim 14 wherein the graphical representation comprises a representation of the length of time of each segment of the telephone call.

18. The method of claim 14 further comprising the step of displaying a table comprising data from the master call record.

19. A computer program for constructing and maintaining data representations of lifetimes of telephone calls comprising one or more segments, audio data for each segment being recorded on one or more recorders, the computer program comprising:

- (a) software for constructing a call record at least one telephone call;
- (b) software for receiving data regarding telephony events associated with one or more telephone calls;
- (c) software for matching a received telephony event with a constructed call record;
- (d) software for updating the matching call record based on the received telephony event data; and
- (e) software for combining the updated call record with data indicating the location of recorded audio data for the segment of the call, to obtain a master call record representing the lifetime of the telephone call.

20. The program of claim 19 wherein software for updating the matching call record comprises one or more handler routines corresponding to the telephony event.

21. The program of claim 19 further comprising software for translating the data regarding telephony events into a platform-specific format.

22. The program of claim 19 wherein the software for matching a received telephony event with a call record uses a confidence factor algorithm.

23. The program of claim 19 wherein the call record is updated with data describing the duration of the telephone call.

24. The program of claim 19 wherein the call record is updated with data describing the start and end time of the telephone call.

¹⁷
~~25.~~ The program of claim ¹³~~19~~ wherein the master call record comprises a serial
5 number that identifies the telephone call.

¹⁸
~~26.~~ The program of claim ¹³~~19~~ wherein the call record is updated with data fields describing each participant of the telephone call.

10 ¹⁹
~~27.~~ The program of claim ¹³~~19~~ further comprising software for assembling and playing back segments of telephone calls using the recorder locations described in the master call record for each telephone call.

²⁰
~~28.~~ The program of claim ¹³~~19~~ further comprising software that uses the master call
15 record to display a graphical representation of said telephone call.

²¹
~~29.~~ The program of claim ¹⁹~~21~~ further comprising software that uses the master call record to display a graphical representation of said telephone call.

20 ²²
~~30.~~ The program of claim ²⁰~~28~~ wherein the graphical representation comprises a representation of each segment of the telephone call.

²³
~~31.~~ The program of claim ¹⁹~~21~~ further comprising software for displaying a table comprising data from the master call record.

25 ²⁴
~~32.~~ An article of manufacture storing a computer program for constructing and maintaining data representations of lifetimes of telephone calls comprising one or more segments, audio data for each segment being recorded on one or more recorders, the computer program comprising:

30 (a) software for constructing a call record for at least one telephone call;

(b) software for receiving data regarding telephony events associated with one or more telephone calls;

(c) software for matching a received telephony event with a constructed call record;

5 (d) software for updating the matching call record based on the received telephony event data; and

(e) software for combining the updated call record with data indicating the location of recorded audio data for the segment of the call, to obtain a master call record representing the lifetime of the telephone call.

10

33. The article of claim 39 wherein software for updating the matching call record comprises one or more handler routines corresponding to the telephony event.

15 34. The article of claim 39 wherein the computer program further comprises software for translating the data regarding telephony events into a platform-specific format.